

# NCBI Virus

Curated collection of viral sequences and related tools  
[ncbi.nlm.nih.gov/genome/viruses/](https://ncbi.nlm.nih.gov/genome/viruses/)

The Viral Genomes page is a hub connecting to all of NCBI Virus's supported resources and documentation, as well as other related NCBI resources. It includes all complete viral genome sequences deposited in the International Nucleotide Sequence Database Collaboration (INSDC) databases.



**7,536** RefSeq genomes  
**146,658** validated neighbor sequences

## Our process

Researchers submit to NCBI and other INSDS databases

**Viruses**

**Proviruses**

**Satellites**

**Viroids**



All sequences in INSDC databases

### RefSeq

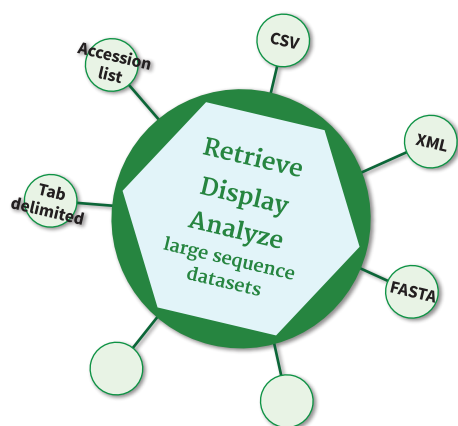
Reference sequence records from one (in some cases more) complete genome sequence for each viral species.

### Neighbors

Other complete genomes from that same species.

## Virus Variation

[ncbi.nlm.nih.gov/genome/viruses/variation/](https://ncbi.nlm.nih.gov/genome/viruses/variation/)



Each module is supported by pipelines that scan newly released GenBank records, annotate genes and proteins and parse sample descriptors and then map them to controlled vocabulary. These processes in turn support a purpose-built search interface where users can select sequences based on standardized gene, protein and metadata terms. Once sequences are selected, a suite of tools for downloading data, multi-sequence alignment and tree building supports a variety of user directed activities.

**influenzaviruses**  
**dengue viruses**  
**rotavirus A**  
**Zika virus**  
**ebolaviruses**  
**West Nile virus**  
**MERS coronavirus**



**Need help? Have suggestions?** Contact us at  
[info@ncbi.nlm.nih.gov](mailto:info@ncbi.nlm.nih.gov) with subject: *viral genomes resource*



U.S. National Library of Medicine  
National Center for Biotechnology Information

# What's on the horizon for NCBI Virus?

## NCBI Virus

Viewing results for Ebolavirus, taxid:186536 [Select another virus](#)

Refine Result [Clear All](#)

Sequence type >

Geographic region >

Host >

Isolation source >

Collection Date >

Selected Results: 0

Customize Table

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Nucleotide (2,347)

Protein (0)

Select	Accession	Genome Region	Host	Country
<input type="checkbox"/>	<a href="#">KU296829</a>	NP - L	Homo sapiens	Sierra Leone
<input type="checkbox"/>	<a href="#">KU296830</a>	NP - L	Homo sapiens	Sierra Leone
<input type="checkbox"/>	<a href="#">KU296831</a>	NP - L	Homo sapiens	Sierra Leone
<input type="checkbox"/>	<a href="#">KU296833</a>	NP - L	Homo sapiens	Sierra Leone
<input type="checkbox"/>	<a href="#">KU296834</a>	NP - L	Homo sapiens	Sierra Leone
<input type="checkbox"/>	<a href="#">KU296835</a>	NP - L	Homo sapiens	Sierra Leone

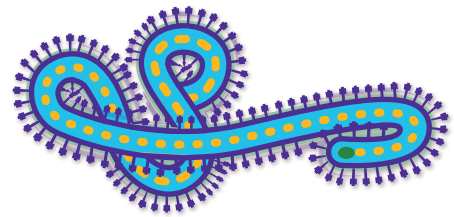
Try it out at

[ncbi.nlm.nih.gov/labs/virus/vssi/](https://ncbi.nlm.nih.gov/labs/virus/vssi/)

## New, integrated virus resource!

NCBI Virus resources are currently being redesigned to extend current functionalities to all virus groups and viroids. Additionally, the newly developed interface provides more intuitive functionality via a modernized look and feel. Try it out and let us know what you think!

- Normalized host and isolation source terms
- Specialized search, alignment and tree-building tools
- Validated full-length genomes and references
- Standardized gene and protein annotation for select viral pathogens



Introducing at NCBI Labs...

## Virus Sequence Selection Interface

[ncbi.nlm.nih.gov/labs/virus/surveillance#!/](https://ncbi.nlm.nih.gov/labs/virus/surveillance#!/)

Provides rapid insight into query sequences by presenting Blastn and Blastp results alongside their biological and genetic attributes. Virus Sequence Selection Interface currently supports BLAST searches for following popular virus groups: influenzaviruses, rotavirus A, dengue viruses, West Nile virus, Zika virus, ebolaviruses, and MERS coronavirus sequences

### Virus Sequence Selection Interface

The Virus Sequence Selection Interface provides rapid insight into query sequences by presenting Blastn and Blastp results alongside their biological - isolation source, host, country, date - and genetic attributes. The interface currently supports BLAST searches for influenzaviruses, rotavirus A, dengue viruses, West Nile virus, Zika virus, ebolaviruses, and MERS coronavirus sequences.

Nucleotide Protein

KP178538.1

Try an Ebolavirus example: KP178538.1

Ebolavirus

Search

Request ID: KPYX8M37014

Filters

Multiple Alignment

Phylogenetic Tree

Download

#	Coverage	Identity	Accession	Virus	Type	Country	Host	Collection Date
1	100.00	100.00	KP178538	Zaire ebolavirus	Zaire	Liberia	Human	2014-09-03
2	99.99	99.99	KM034557	Zaire ebolavirus	Zaire	Sierra Leone	Human	2014-05-27
3	100.00	99.98	KU150715	Zaire ebolavirus	Zaire	Sierra Leone	Human	2014-06-19
4	99.99	99.98	KM233056	Zaire ebolavirus	Zaire	Sierra Leone	Human	2014-06-07

## Want to help?

Send us your feedback!

Volunteer to test our new designs!

Send an email to [info@ncbi.nlm.nih.gov](mailto:info@ncbi.nlm.nih.gov) with subject "NCBI Virus - testing".